

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. FILING DATE                    |                | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |  |
|--|----------------|----------------------|-------------------------|-----------------|--|
| 09/768,494                                     | 01/24/2001     | Peter C. Van Buskirk | 2771-272                | 2111            |  |
| 75   | 590 06/18/2003 |                      |                         |                 |  |
| Oliver A. Zitzmann ATMI, Inc. 7 Commerce Drive |                |                      | EXAMINER OLSEN, ALLAN W |                 |  |
|  |                |                      |                         |                 |  |
|  |                |                      | 1763                    | 1)              |  |
|  |                |                      | DATE MAILED: 06/18/2003 | (               |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |  | Application No.      |  | Applicant(s)                                   |                   |  |  |  |
|---|--|----------------------|--|--|-------------------|--|--|--|
|   |  | 09/768,494           |  | BUSKIRK ET AL.                                 |                   |  |  |  |
|   | Office Action Summary  | Examiner             |  | Art Unit                                       |                   |  |  |  |
|   |  | Allan W. Olsen       |  | 1763   |                   |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |  |                      |  |  |                   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |                      |  |  |                   |  |  |  |
| Status  | : (:/-) Elad on 02 (   | Anril 2002           |  |  |                   |  |  |  |
| 1)⊠   | OLIVI This action is non final   |                      |  |  |                   |  |  |  |
| 2a) <u></u> □   | 11110 0000011 10 1 11 11   |                      |  | resecution as to t                             | he merits is      |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |                      |  |  |                   |  |  |  |
| Disposition of Claims  4) ☑ Claim(s) 2-4,12-14,24-27,53 and 57-62 is/are pending in the application.  |  |                      |  |  |                   |  |  |  |
| 4) Of the above claim(s) is/are withdrawn from consideration.   |  |                      |  |  |                   |  |  |  |
| 5) Claim(s) is/are allowed.   |  |                      |  |  |                   |  |  |  |
| 5)  |  |                      |  |  |                   |  |  |  |
|   |  |                      |  |  |                   |  |  |  |
| <ul> <li>7) Claim(s) is/are objected to.</li> <li>8) Claim(s) are subject to restriction and/or election requirement.</li> </ul>  |  |                      |  |  |                   |  |  |  |
| 8)[_] Claim(s) are subject to restriction and/or election requirement.  Application Papers  |  |                      |  |  |                   |  |  |  |
|   | The specification is objected to by the Examine  | er.                  |  |  |                   |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  |  |                      |  |  |                   |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |                      |  |  |                   |  |  |  |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.  |  |                      |  |  |                   |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |  |                      |  |  |                   |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.   |  |                      |  |  |                   |  |  |  |
| Priority  | Priority under 35 U.S.C. §§ 119 and 120  |                      |  |  |                   |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |  |                      |  |  |                   |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  |  |                      |  |  |                   |  |  |  |
|   | 1. Certified copies of the priority documents have been received.  |                      |  |  |                   |  |  |  |
|   | 2. Certified copies of the priority documents have been received in Application No   |                      |  |  |                   |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.  |  |                      |  |  |                   |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |  |                      |  |  |                   |  |  |  |
| a) ☐ The translation of the foreign language provisional application has been received.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.   |  |                      |  |  |                   |  |  |  |
| Attachme  |  |                      |  |  |                   |  |  |  |
| 1) Not  | ice of References Cited (PTO-892) ice of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449) Paper No(s) | 4) [<br>5) [<br>6) [ |  | ary (PTO-413) Paper<br>al Patent Application ( |                   |  |  |  |
| LL C Patent and   | Trademark Office   |                      |  |  | t of Danor No. 12 |  |  |  |

Application/Control Number: 09/768,494

Art Unit: 1763

### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 61 is rejected under 35 U.S.C. 102(a) as being anticipated by Tea et al. in Journal of Microelectromechanical Systems, vol. 6, no.4, pages 363-372.

Tea et al. disclose the etching of Iridium with XeF2. See the last half of the second full paragraph on page 364.

The instant application claims priority-in-part to 08/966,797, which has a filing date of November 10, 1997. However, the date on which the transcript of the Tea document was originally submitted is February 25, 1997. Therefore, it is evident that the method of claim 61 was known or used by others in this country prior to the filing date of 08/966,977.

## **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Application/Control Number: 09/768,494

Art Unit: 1763

Claims 2-4, 12-14, 24-27, 53, 57-62 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6, 8-10, 12-17, 21-23, 25,26, 28, 29, 31-33 and 35-51 of copending Application No. 09/874102.

Although the conflicting claims are not identical, they are not patentably distinct from each other because each limitation of the instant claims are claimed in the copending Application No. 09/874102, the only difference being that Application No. 09/874102 recites additional limitations such as the inclusion of oxygen or ozone in the reactive gas.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

## Allowable Subject Matter

Claims 2-4, 12-14, 24-27, 53, 57-60 and 62 are allowable over the prior art but they stand rejected under the judicially created doctrine of obviousness-type double patenting. The obvious type double patenting rejections may be overcome by filing the necessary terminal disclaimer.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allan Olsen whose telephone number is 703-306-9075. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Mills, can be reached on 703-308-1633.

The general fax numbers for TC1700 are 703-872-9310 (non-after finals) and 703-872-9311(after-final).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Allan Olsen, Ph.D.

June 6, 2003

Ma (1763